

Commonwealth of Kentucky
Division for Air Quality
PERMIT STATEMENT OF BASIS

TITLE V DRAFT NO. V-02-020 (REVISION 2)

AK STEEL CORPORATION

Ashland, KY

JULY 2, 2004

BRIAN SMITH, REVIEWER

PLANT I.D. # 21-019-00005

APPLICATION LOG # 56476

SOURCE DESCRIPTION:

AK Steel operates a steel mill in Ashland, Kentucky, an attainment area for ozone, NO_x, CO, and particulates, but nonattainment for SO₂. They are subject to Title V permitting requirements because their potential to emit for each criteria pollutant is greater than 100 tons/yr. A Title V application was received by the Division on December 13, 1996. The application was called complete on February 14, 1997. AK Steel has since proposed a production increase of sufficient magnitude to trigger PSD (401 KAR 51:017, "Prevention of Significant Deterioration of Air Quality"). They have netted out of PSD by using emission credits obtained from significant emissions decreases over the past ten years. A Title V permit was issued to AK Steel on October 6, 2003.

AK Steel is proposing to construct a new addition to their plant consisting of a vacuum degasser and modified slab caster. The new construction would increase emissions as follows:

Pollutant:	Emissions Increase (tons/yr)
Total Particulates	10.05
PM ₁₀	10.05
SO ₂	0.04
NO _x	7.49
CO	37.32
VOC	0.99

These emissions increases are below the significant net emission levels under PSD. Therefore, this application will be processed as a Title V significant revision.

COMMENTS:

AK Steel has proposed the following modifications at their Ashland facility:

EP 111 - Flare

Applicable Regulations: 401 KAR 63:015, "Flares"

Construction Date: 2004

EP 112 - Cooling Tower

Applicable Regulations: None

Construction Date: 2004

EP 113 & 114 - Preheat Stations

Applicable Regulations: 401 KAR 59:010, "New process operations"

Construction Date: 2004

EP 115 - Alloy Transfer System and Vacuum Degasser

Applicable Regulations: 401 KAR 59:010, "New process operations"

Construction Date: 2004

EP 89 - Continuous Slab Caster

The natural gas limit in the original Title V permit issued by the Division was incorrect. The limit was changed to reflect the correct value of 51.53 million ft³/12 consecutive months.

Type of Control: building capture

Applicable Regulations: 401 KAR 59:010, "New process operations"

Construction Date: 1990

The Division also determined that, contrary to the initial issuance of this permit, the process gas stream regulation does not apply to EP 04, Amanda Flare. Therefore, that regulation and its associated requirements were removed from the permit, and language similar to EP 111 was added.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has not incorporated these provisions in its air quality regulations.